

ABSTRACT OF THE DISCLOSURE

An optical glass having a refractive index (n_d) and an Abbe number (v_d) which are within an area surrounded by the straight lines which are drawn by connecting point A ($n_d=1.835$, $v_d=46.5$), point B ($n_d=1.90$, $v_d=40.0$), point C, ($n_d=1.90$, $v_d=35.0$) and point D ($n_d=1.835$, $v_d=38.0$) in a sequence of A, B, C, D and A as border lines in x-y coordinates shown in FIG. 1, in which X-axis is the Abbe number (v_d) and Y-axis is the refractive index (n_d), the area including the border line. The optical glass has low glass transition temperature (T_g), and suitable for precision mold pressing. The optical glass which has the refractive index (n_d) and Abbe number (v_d) within the above-described area, where the area includes the border lines, has the composition of $\text{SiO}_2\text{-B}_2\text{O}_3\text{-La}_2\text{O}_3\text{-Gd}_2\text{O}_3\text{-Li}_2\text{O-F}$ system, the transition temperature (T_g) of 550 to 650°C, and is free from lead, cadmium, thorium, Y_2O_3 , P_2O_5 and TeO_2 .